

**ABSTRACT**

A state machine system can include a state machine modeling tool, the modeling tool producing UML specified state chart diagrams; a conversion script add-in to the state machine modeling tool, the add-in defining markup language representations of the UML specified state chart diagrams produced by the state machine modeling tool; and, a state machine run-time engine which is separate from the state machine modeling tool, the run-time engine executing the markup language representations defined by the add-in. The markup language representations can be XML representations of the UML specified state chart diagrams.